

United States
Department of
Agriculture

Forest
Service

Lassen
National
Forest

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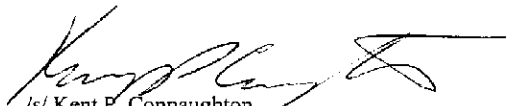
Date: June 23, 1998

CALFED Bay-Delta Program Office
1416 Ninth Street, Suite 1155
Sacramento,
CA 95814

CALFED Program Managers:

We are responding to your 1998 CALFED Request for Proposals. Enclosed, please find 10 copies of our formal proposal to conduct ecosystem restoration work on National Forest Lands in the Battle Creek watershed located in the North Sacramento Valley Ecological Zone, and the Butte Creek watershed located in the Butte Basin Ecological Zone. This Proposal represents Phase I of a two phase project to restore ecological processes, improve forest management practices, and begin preliminary watershed assessment plans that are consistent with the goal of restoring and maintaining riparian and aquatic ecosystems in these two anadromous fish-producing watersheds. We will identify opportunities to stabilize sediment sources and pursue land acquisition opportunities for the purpose of improving riparian and instream conditions. Restoration opportunities identified and analyzed in Phase I would be implemented in Phase II.

The Forest has recently selected two individuals to coordinate and implement our current CALFED projects in the Deer, Mill and Antelope Creek watersheds and to also represent the Forest on this proposal. Russ Volke and Greg Napper can be reached at the addresses listed below. Should our proposal be funded, my Chief Financial Officer, Karyl Georgio would be the primary contact for fiscal matters. Her address is also listed below. Please telephone Russ Volke or Greg Napper if you have any questions about the enclosed formal proposal.


/s/ Kent P. Connaughton
KENT P. CONNAUGHTON
Forest Supervisor

ENCLOSURES: 10 copies, Phase I formal proposal

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I. 1998 CALFED ECOSYSTEM RESTORATION PROPOSAL SOLICITATION

Proposal Title: Watershed Improvement: Stabilization of potential sediment sources within the Battle and Butte Creek watersheds on the Lassen National Forest lands. Phase I of two phases)

Applicant Name: USDA, Forest Service, Lassen National Forest

Mailing Address: Supervisors Office, Lassen National Forest
55 S. Sacramento Street, Susanville, CA 96130

Telephone: (530) 257-2151

Fax: (530) 252-6428

Amount of Funding Requested: \$295,850 for Four years.

Indicate the Topic for which you are applying. Note that this is an important decision: See page__ of the proposal Solicitation Package for more information.

- | | |
|---|---|
| <input type="checkbox"/> Fish Passage Assessment | <input type="checkbox"/> Fish Passage Improvements |
| <input type="checkbox"/> Floodplain and Habitat Restoration | <input type="checkbox"/> Gravel Restoration |
| <input type="checkbox"/> Fish Harvest | <input type="checkbox"/> Species Life History Studies |
| <input checked="" type="checkbox"/> Watershed Planning/Implementation | <input type="checkbox"/> Education |
| <input type="checkbox"/> Fish Screen Evaluations - Alternatives and Biological Priorities | |

Indicate the geographical area of your proposal (check only one box)

- | | |
|---|---|
| <input type="checkbox"/> Sacramento River Mainstem | <input checked="" type="checkbox"/> Sacramento Tributary: |
| <input type="checkbox"/> Delta | <input type="checkbox"/> East Side Delta Tributary: |
| <input type="checkbox"/> Suisun Marsh and Bay | <input type="checkbox"/> San Joaquin Tributary |
| <input type="checkbox"/> San Joaquin River Mainstem | <input type="checkbox"/> Other: |
| <input type="checkbox"/> Landscape | <input type="checkbox"/> North Bay: |

Indicate the primary species which the proposal addresses (check no more than two boxes)

- | | |
|--|---|
| <input type="checkbox"/> San Joaquin and East-side Delta tributaries fall-run chinook salmon | |
| <input type="checkbox"/> Winter-run chinook salmon | <input checked="" type="checkbox"/> Spring-run chinook salmon |
| <input type="checkbox"/> Late-fall run chinook salmon | <input type="checkbox"/> Fall-run chinook salmon |
| <input type="checkbox"/> Delta smelt | <input type="checkbox"/> Longfin smelt |
| <input type="checkbox"/> Splittail | <input checked="" type="checkbox"/> Steelhead trout |
| <input type="checkbox"/> Green sturgeon | <input type="checkbox"/> Striped bass |
| <input type="checkbox"/> Migratory birds | |

Indicate the type of applicant (check only one box)

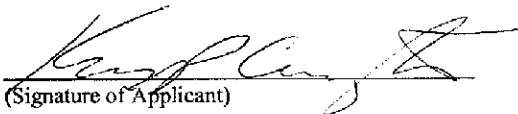
- | | |
|--|--|
| <input type="checkbox"/> State agency | <input checked="" type="checkbox"/> Federal Agency |
| <input type="checkbox"/> Public/Non-Profit joint venture | <input type="checkbox"/> Non-profit |
| <input type="checkbox"/> Local government/district | <input type="checkbox"/> Private party |
| <input type="checkbox"/> University | <input type="checkbox"/> Other: |

Indicate the type of project (check only one box)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Planning | <input type="checkbox"/> Implementation |
| <input type="checkbox"/> Monitoring | <input type="checkbox"/> Education |
| <input type="checkbox"/> Research | |

By signing below, the applicant declares the following:

- (1) the truthfulness of all representations in their proposal;
- (2) the individual signing the form is entitled to submit the application on behalf of the applicant (if applicant is an entity or organization); and
- (3) the person submitting the application has read and understood the conflict of interest and confidentiality discussion in the PSP (Section II.K) and waives any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent as provided in the Section.


(Signature of Applicant)

II. EXECUTIVE SUMMARY

A. Project Title and Applicant Name

Title: "Watershed Improvement: Stabilization of potential sediment sources within the Battle and Butte Creek Watersheds on Lassen National Forest lands." Topic: Local Watershed Stewardship

Applicant: USDA, Forest Service, Lassen National Forest

B. Project Description and Primary Biological/Ecological Objectives

This formal proposal is for funding to complete Phase I of a two phase strategy to reduce the generation of fine sediment from upland and riparian, road-related sources in the Battle and Butte Creek watersheds. The first task of Phase I would be to complete a road survey on National Forest, National Park, and participating privately owned lands, which would compliment the already completed or ongoing survey efforts being conducted on Federal and private lands through 1997 CALFED funds. This survey would be the foundation for the development of a comprehensive Road Management Plan, Task 2 of Phase I, for the National Forest portion of these watersheds. Additionally, Task 3 of Phase I would be the preparation of a watershed assessment for the National Forest portion of each watershed. Lastly, Task 4 of Phase I would pursue new land acquisition and exchange opportunities with the goal of identifying willing sellers for subsequent CALFED purchase action. All four Tasks are designed to provide long term benefits to spring and fall-run chinook salmon and steelhead habitat. The completed road management plans, and the preparation of watershed assessments would compliment the CALFED long term strategy to develop comprehensive watershed management plans for each watershed as outlined in the Ecosystem Restoration Program Plan (ERPP). These four Phase I tasks would prepare for Phase II, which would consist of extensive restoration contracts to remedy road-related problems, and to complete any land acquisition actions identified in Phase I within the boundaries of the National Forest.

Both the Battle Creek and the Butte Creek watersheds are considered important for the Central Valley anadromous fish (Steelhead trout is federally listed as threatened and spring and fall-run chinook salmon is proposed for listing) and have a high potential for restoration. The ERPP states that "the Battle Creek watershed has the best connection between the river and mountainous areas of any Sacramento River Ecological Unit. Based on a 1991 spawning habitat evaluation, Battle Creek has acceptable spawning habitat for over 1800 pair of chinook salmon above the Coleman Fish Hatchery." The Butte Creek watershed within the Butte Basin Ecological Zone, historically has supported more than 4,000 spring-run chinook salmon. The Fish and Game records indicate that as recently as 1995 Butte Creek demonstrated its ability to attract large numbers of spring-run chinook salmon when 6,000 were recorded. The ERPP states, "because of the critically low numbers of spring-run chinook salmon in the Sacramento River drainage, any expansion of habitat for that race has a high priority," and these two watersheds can provide some of this habitat.

The objectives of both phases are: 1. The inventory, prioritizing and stabilization of fine sediment sources and the consequent protection and improvement of instream and downstream anadromous fisheries habitat and water quality, and 2. The completion of road management plans and accompanying monitoring plans for Phase II that will be suitable for incorporation into eventual Watershed Management Plans for each watershed. The ecosystem improvements developed under Phase II would create long term, stable benefits. Maintenance of any improvements developed in Phase II would be assumed by the Forest Service.

C. Approach/Tasks/Schedule

This project would be accomplished in two phases. This proposal is for Phase I funding, to finance four Tasks: (1) Complete a road survey on National Forest and National Park lands; (2) Complete a Road Management

Plan, a Monitoring Plan, and the NEPA planning for the stabilization of identified road-related problems for the National Forest portion of the watersheds; (3) Complete a watershed analysis for National Forest portions of both watersheds; and (4) Identify willing sellers or private parties interested in land exchange, with priority to acquiring riparian parcels. Phase I would be accomplished over a four year period, from 1999 to 2002. A subsequent Phase II would accomplish restoration of sites identified in Tasks 1 and 2 of Phase I and acquisition of any lands or conservation easements from willing sellers. The formal proposal for Phase II would be submitted in 2001, for accomplishment in the 2002-2004 period. Each phase would include monitoring and evaluation of restoration and operational activities. The monitoring would follow the protocols developed as a part of the road management plans.

D. Justification for Project and Funding by CALFED

National Forest funds, based on the last few years' Forest Service budgets, will allow (at best) only a gradual accomplishment of the inventory, planning and implementation of stabilizing measures included in this proposal. Timber sale revenues would be a potential source of additional funds, but current timber management restrictions and harvesting practices have substantially reduced sale revenues, and consequently the number of dollars available for ecosystem restoration work. CALFED supplemental funding would promote the development of integrated road management plans that would meet PACFISH requirements in these watersheds and the stabilization of at least the high priority sediment sources over the next six years. Without CALFED support, it could take 20 years to attain the same benefits.

E. Budget Costs and Third Party Impacts

Requested CALFED funding for this project (Phase I) is \$295,850. The proposed Forest Service contribution is \$51,000. The only anticipated third party impacts could be from a loss of vehicle access to some roads that may be closed or decommissioned in Phase II. The Phase I Road Management Plan would address any concerns associated with closing and/or decommissioning roads and contain options to mitigate these concerns.

F. Applicant Qualifications

The Lassen National Forest and its Almanor Ranger District include staff hydrologists, fisheries biologists, wildlife biologists, archaeologists, botanists, and engineers to develop the proposed inventories, site surveys, designs and other products, and to administer construction contracts. The Forest also has an experienced fiscal and accounting staff to maintain the fiscal integrity of the proposed project.

G. Monitoring and Data Evaluation

The Forest and District staff are experienced with monitoring and evaluation of similar watershed improvement and fisheries projects, as are the engineering staff. A monitoring plan will be completed in Phase I in accordance with the Pacific Southwest Region's Best Management Practices Evaluation Process, and any additional cooperatively developed protocols contained within the Road Management Plan. This Monitoring Plan would be the basis for evaluating the effectiveness of Phase II restoration projects.

H. Local Support/Coordination with other Programs/Compatibility with CALFED Objectives.

The proposed project is consistent with CALFED objectives and has involved members of the Battle and Butte Creek Conservancies. Cooperation and collaboration between the conservancies, private landowners, and the Lassen National Forest has provided assurance that this proposal complements other proposals being submitted for the upper watersheds of Battle and Butte Creeks. This proposal represents some initial steps of a cooperative effort to develop watershed management strategies that emphasize positive benefits to anadromous fish populations dependent on these Ecological Units. It is hoped that all land owners will be able to benefit from the results of this proposal and work together to reduce human-caused sediment increases and improve the riparian and aquatic habitat within the two watersheds.

III. WATERSHED IMPROVEMENT

STABILIZATION OF POTENTIAL SEDIMENT SOURCES

Within

UPPER BATTLE AND BUTTE CREEK WATERSHEDS

PHASE I of TWO PHASES

Applicant: Lassen National Forest

Principal Investigators:

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Phone: (530) 257-2151
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Type of Organization/

Tax Status:

Federal Government/Exempt

Tax ID Number/

Contractor License:

Not Applicable

Technical/

Financial Contacts:

: Greg Napper, Almanor Ranger District
Russell Volke, Almanor Ranger District
L. Stephen Young, Supervisors Off.
Karyl Georgio, Chief Financial Officer, Supervisors Off.

Participants/

Collaborators:

Lassen National Forest
Battle Creek Watershed Conservancy
Butte Creek Conservancy
Sierra Pacific Industries

FP Project Group Types:

Type 1 (Construction)
Type 3 (Other Services)

IV. PROJECT DESCRIPTION

A. Project Description and Approach

This proposal contains four Tasks: completion of a road survey to isolate high erosion producing road segments, planning for future road related restoration treatments, erosion control maintenance, monitoring, and transportation system management to reduce or eliminate sediment delivery, preparation of a watershed assessment, and evaluation of private land acquisition within the National Forest portions of these watersheds. The strategies for road treatments would include decommissioning roads from near stream zones, and restoring and maintaining natural hydrologic flow paths to the benefit of anadromous fish.

Completion of a Road Survey: This task includes assessing the extent of sediment contribution, past and potential, from road systems, identifying patterns of recurring problems that can help redirect road construction and maintenance practices, and identifying, mapping, and prioritizing specific road-related sediment sources in both watersheds. Additionally, this survey would be used to update the Forests road inventory GIS layer. This survey covers roads within 21 of the 23 upper subwatersheds in Battle Creek Watershed totaling 61,300 acres, and 11 of the 17 upper subwatersheds in Butte Creek Watershed totaling 26,400 acres on National Forest, National Park, and participating privately owned lands.

The road survey would compliment, not duplicate, the approved CALFED Chico State University and Butte Creek Conservancy road survey proposal for the Scotts John, Valey, and Bull Subwatersheds.

Planning for Future Road Related Erosion Control Measures: This task includes site survey, development of Road Management Plans, identification of treatment needs, development of a Monitoring Plan, site design and coordination with private landowners, State and County road departments, cost share road partners, etc., and the completion of NEPA documents. The completed road surveys for Battle and Butte Creek Watersheds are integral to completing the Road Management Plans for these watersheds as directed by PACFISH. This plan would identify appropriate maintenance levels for all roads on the system, and identify additional roads for decommissioning. Roads would also be identified for seasonal closure. The accompanying Monitoring Plan would assure implementation of designs and mitigation measures, and evaluate their effectiveness. Because portions of the two watersheds are privately owned, development of this plan would involve considerable coordination with the private landowners. Site specific plans for all priority areas would be prepared so that in Phase II contracts could be prepared, and fully mitigated projects could be implemented. Priority sites are those that currently are high sediment producers, or have a risk of being high sediment producers. Work would begin on an archaeological inventory and survey, biological surveys and assessments, and consultations with other responsible agencies about threatened and endangered species effects.

Preparation of a Watershed Assessment: This task includes identifying with partners data collection needs and survey protocols, and the gathering of key watershed information needed to complete the Road Management Plan, implement restoration projects, and complete a preliminary Watershed Assessment for the National Forest portions of the two watersheds. The watershed assessment, like the road surveys, and road management plans would support the larger CALFED vision of having completed watershed management plans for these watersheds in the future.

Evaluation of Private Land Acquisition Opportunities: This task involves contact of private landowners to determine their interest in selling/exchanging land, and then prioritizing any

identified potential acquisitions. The prioritizing criteria would be based on both the lands potential for providing suitable riparian and aquatic habitats and its potential to contribute sediment in these watersheds.

B. Proposed Scope of Work

This proposal would accomplish the first phase of a two phase watershed restoration program for Battle and Butte Creek watersheds. Tasks identified in Phase I will be implemented over the next three years. Some of the tasks in this phase involve planning for future (more than three years from now) implementation. For example, planning for future road-related erosion control measures within the next three years would complete planning for projects to be implemented starting in 2001 as part of Phase II. Similarly, planning in the next three years for land acquisitions may lead to acquisitions in out-years.

The following list displays the specific tasks and deliverables of Phase I. These tasks would be conducted concurrently for approximately the next three years.

Task 1: Completion of a road surveys in Battle and Butte Creek Watersheds on National Forest and National Park lands, that include State and County roads.

- a. Complete field data collection portion of road surveys.
- b. Complete analysis of road surveys which includes:
 1. Extent of sediment contribution, past and potential, from the road systems,
 2. Identification of recurring road problems,
 3. Identification, mapping, and prioritizing of specific road-related sediment sources for treatment.
- c. Update Forest Service road inventory database and add to GIS.

Product of Task 1: A completed Road Survey and an updated road inventory database.

Task 2: Planning for future road-related erosion control measures.

- a. Initiate road management planning process, including public involvement and identification of objectives.
- b. Coordinate with cost-share cooperators, conservancies, county, and private landowners.
- c. Prepare a Road Management Plan for the two watersheds.
(identify/prioritize locations to control erosion based on 2a and 2b)
- d. Complete site surveys, design specifications, and NEPA/ESA process and consultation.
- e. Preparation of a Monitoring Plan to assess implementation of Phase II design features and mitigation measures and their effectiveness. This plan would include a Quality Assurance Project Plan (QUAP).

Product of Task 2: All NEPA documents and consultation are complete and prioritized site specific restoration projects are surveyed, designed, and ready for implementation. A Monitoring Plan is prepared for Phase II projects.

Task 3: Preparation of a Watershed Assessment.

- a. Determine data needs and collection protocol with partners.
- b. Gather existing key watershed information.
- c. Prepare Watershed Assessment Reports

Product of Task 3: A list of data needs and survey protocol completed by watershed partners, data collection, and preparation of Watershed Assessments for the National Forest portions of both watersheds in a format that would support the future development of Watershed Management Plans.

Task 4: Evaluate land exchange opportunities for acquisitions in the two watersheds.

- a. Contact private landowners to determine interest in selling/exchanging land
- b. Prioritize potential land acquisitions based on ecosystem restoration objectives.

Product of Task 4: An updated directory of all current private landowners and a prioritized database of willing sellers.

Deliverables: Financial reports meeting the needs of CALFED and including progress updates will be submitted quarterly or as further specified in project agreements. Monitoring and evaluation reports will be submitted to CALFED annually and at time of completion. If requested by CALFED, copies of the updated road problem inventory and assessments, newly-developed road inventory coverages, the Road Management Plan, NEPA documents, and watershed assessment protocols and data would also be provided.

C. Location and/or Geographic Boundaries of the Project

This project would occur on the Lassen National Forest within the Battle and Butte Creek watersheds (Attachment A). The Battle Creek watershed lies in Tehama and Shasta Counties, and the Butte Creek watershed lies primarily in Butte County.

D. Expected Benefits

The objectives of this project are to protect and improve conditions for the downstream holding, spawning, and rearing habitat for anadromous fish by reducing surface erosion inputs to Battle and Butte Creeks. Stressors are related to sediment, and its impacts to water quality and holding, rearing, and spawning habitats in the watersheds for steelhead (Federally listed as threatened) and fall and spring-run chinook salmon (proposed for Federal listing). The ERPP states that "Battle Creek has the best connection between the river and mountainous areas of any Sacramento River Ecological Unit. Butte Creek has historically supported more than 4,000 spring-run chinook salmon, and as recently as 1995 attracted more than 6,000." These two watersheds are both important for anadromous fish, and are recognized as integral to the long term restoration of anadromous populations at the larger scale.

Roads have been shown by numerous studies to be the primary source of sediment in wildland watersheds. This general finding is supported by the pre-decisional timber management environmental assessments (EA's) completed within portions of Battle and Butte Creek watersheds. The preliminary hydrology findings for both EA's suggest that the current levels of erosion and sedimentation in the two watersheds to be outside their range of natural variability. Although these

EA's propose to do road restoration work, the scope and costs of the needed work are far beyond the anticipated revenues generated from the timber sales. The EA's recommend that more extensive road surveys and analysis is needed to better qualify and quantify all the road-related erosion sources. A 1996 road inventory in the adjacent Deer and Mill Creek watersheds revealed that, as might be expected, not all road segments have equal erosion rates, as 50% of the estimated erosion occurred on only 5% of the roads. Directing efforts to identify and then control erosion on similar segments in the Battle and Butte Creek watersheds should measurably decrease sediment production in these watersheds. Though the natural variability in sediment production is high, and links to anadromous and other aquatic habitat are not direct, these efforts will provide a high degree of protection for habitat in these watersheds, even if changes in habitat cannot be detected in the short term.

E. Background and Biological/Technical Justification

A recently completed Watershed Analysis in the adjacent Antelope, Deer, and Mill Creek watersheds identified control of surface erosion as a top priority. The analysis concluded that there has been a shift in the erosion regime in the watersheds from one dominated by mass wasting (which occurs primarily in the unroaded portions of the watersheds) to one that is influenced by chronic surface erosion in addition to mass wasting. Watershed assessments at all scales, including the Forest Ecosystem Management Assessment for the Pacific Northwest, have determined that roads are the primary chronic surface erosion source. GIS data analysis of the history of the development of transportation systems in these contiguous watersheds indicate that the pulses of growth through time occurred evenly across the landscape. This strongly suggests that the types of erosion problems found in one area are very likely repeated in another. That same shift in erosion regime discovered in the Antelope, Deer, and Mill Creek analysis are expected in Battle and Butte Creek watersheds.

The Battle Creek Watershed portion of the proposal is consistent with the objectives identified under the Upper Watershed Processes, and Habitats sections of the ERPP for the North Sacramento Valley Ecological Zone. Specifically on page 184 under Upper Watershed Processes our proposal is designed to help meet the objective of restoring the ecological processes in the upper watersheds to maintain and improve water quality and quantity for the anadromous fishery. Tasks 1, 2, and 3, of Phase I, to complete a road inventory and road management plan, and to initiate a watershed assessment plan fall under the Programmatic Action 1B. The design and completion of these tasks would work complimentary to the ERPP objectives of developing a watershed management plan as listed under programmatic action 1C. Additionally, on page 184 under Habitats task 4 of our proposal is designed to help meet the objective of developing a cooperative program to establish riparian habitat zones along streams through conservation easements, fee acquisition, or voluntary landowner measures. Task 4, to pursue new land acquisition and exchange opportunities falls under the programmatic action 1A.

The Butte Creek Watershed portion of the proposal is consistent with the objectives identified under the Upper Watershed Processes, and Habitats sections of the ERPP for the Butte Basin Ecological Zone. Specifically on page 239 under Upper Watershed Processes our proposal is designed to help meet the objective of restoring the ecological processes in the upper watersheds to maintain and improve water quality and quantity for the anadromous fishery. Tasks 1, 2, and 3, of phase one, to complete a road inventory and road management plan, and to initiate a watershed assessment plan fall under the Programmatic Action 1B. The design and completion of these

tasks would work complimentary to the ERPP objectives of developing a watershed management plan as listed under programmatic action 1C. Additionally, on page 241 under Riparian and Riverine Habitats task 4 of our proposal is designed to help meet the objective of developing a cooperative program to restore and maintain riparian habitat along Butte Creek. Task 4, to pursue new land acquisition and exchange opportunities falls under the programmatic action 4A.

This proposal calls for a road inventory to isolate high erosion producing road segments. Then, after developing road management objectives, appropriate road restoration treatments can be prescribed and implemented to reduce or eliminate sediment delivery. Some of the anticipated road treatments would include decommissioning roads from near stream zones, improvements to road surfacing, relocating roads, improving/eliminating stream crossings, and restoring and maintaining natural hydrologic flow paths.

The duration of the benefits (reduced sediment production) should be long term. Those roads that are decommissioned will have greatly reduced sediment production and will require minimal maintenance to keep them in a stable condition. For roads that will be treated, prescriptions that require low maintenance (e.g. outsloping) will be emphasized, as will prescriptions that lower existing risk of site failure (bridges, low water crossings, debris racks, surfacing, or other measures). The project should help to return the sediment and runoff regimes in these watersheds closer to their natural condition.

Addressing erosion sources in these basins is an ongoing project. Completion of a road survey is integral to this proposal, the logic being that this survey would help focus constrained restoration dollars on the highest priority sites. In the past, efforts have focused on improving stream crossings, and at spot surfacing of highly erosive surfaces. The CALFED funding opportunity affords the chance to greatly accelerate accomplishing this necessary work at the watershed scale.

Likewise, the Forest investigated acquisition of private parcels in these watersheds five to six years ago. Although there was little interest in either sale or exchange at that time, conditions have changed and there is some indication that acquisitions or exchanges for key parcels may be a possibility and should be re-explored.

F. Monitoring and Data Evaluation

The Lassen National Forest already has in place a long-term plan to monitor the trend in condition of streams in the two watersheds. This plan includes in-stream assessments of reaches on the streams' main channels and/or tributaries. The protocol has undergone external review. Prior to project implementation, the Forest will review the monitoring plan with the California Department of Fish and Game, Department of Water Resources, the Central Valley Regional Water Quality Control Board, U.S. Fish and Wildlife Service, and National Marine Fisheries Service, to confirm the sites and attributes included in the plan will adequately assess effectiveness of the project. Data from these sites will help assess the effectiveness of the implemented treatments on aquatic habitat condition.

In addition, the Pacific Southwest Region of the Forest Service has adopted protocols for on-site evaluation of watershed restoration practices. These procedures underwent extensive external review during their development in 1992-3 and are being revised and updated in 1998-99.

The evaluations include assessment of both implementation and effectiveness. The Task I road surveys will provide invaluable site specific baseline sediment generation data which can be compared against sediment generated from the same sites following restoration work.

As with the in-stream assessments, these protocols will be reviewed prior to project implementation to confirm they will provide adequate data. Where necessary, additional monitoring protocols will be developed. Data from both efforts will be summarized annually, and the partners listed above will be consulted to review interpretation of results. In addition, results will be reported to CALFED.

G. Implementability

There is considerable support for this proposal by members of the Battle Creek and Butte Creek Conservancies, private landowners, and other local groups and persons. All Forest Service actions require compliance with National Environment Protection Act, the Endangered Species Act, and other environmental laws and regulations. Preparation of environmental documents, public scoping, and coordination and consultation are provided for in the project proposal.

V. COSTS AND SCHEDULE TO IMPLEMENT PROPOSED PROJECT

a. Budget Costs

Budget costs for the proposed tasks in Phase I are summarized in Table 1 (Attachment B). The expected contributions from National Forest funds are included in that table, and they would total \$51,000. The requested CALFED funding to complete the tasks detailed in the table is \$295,850. This project would set the stage for a Phase II implementation project (to be detailed in a subsequent proposal) that would eliminate or greatly reduce road-related sediment sources in the Battle and Butte Creek watersheds. Phase I of this proposal would accomplish needed archaeological inventory and evaluation work attendant to the identification of road problems, as well as the NEPA and accompanying consultation with various agencies concerning proposals with potential to affect proposed or listed species (i.e. spring-run chinook salmon and steelhead).

Considering the current restrictions on National Forest timber sales in these watersheds, Forest Service funds for this kind of project would be limited to at most \$20,000 to \$40,000 per year from timber sale receipts and watershed and fisheries funds. Long term sediment reduction would be most rapidly accomplished with CALFED support. Without that support, it could take up to 20 years to rehabilitate the high priority problem sites, and other sites could be deferred indefinitely.

All tasks of Phase I can be accomplished by Forest Service Agency personnel. It is possible, however, that a service contract could be prepared for Tasks 1a and b (road survey). Whether accomplished by Agency personnel or private contractors, previously established standard protocols for road surveys would be maintained. Long term maintenance for the ecosystem improvements developed under Phase I and implemented in Phase II on National Forest lands would be assumed by the Forest Service, without additional CALFED funding requirements.

b. Schedule Milestones

The proposed schedule for the tasks included in Phase I is described in Table 2, in Attachment B. Phase I would be accomplished over the period 1999-2002. Phase II would depend on inventories, designs, plans, and mitigative measures developed in Phase I. If Phase I is funded, the proposed schedule for Phase II is described in Table 2. A separate proposal for Phase II would be submitted in the year 2002.

c. Third Party Impacts

The only anticipated third party impacts could be from a loss of vehicle access to some roads that may be closed or decommissioned in Phase II. The road management planning efforts of Phase I would include a public involvement phase where any concerns associated with closing and/or decommissioning specific roads as recommended by the road management plan would be addressed.

VI. APPLICANT QUALIFICATIONS

The Lassen National Forest has on staff a group of well qualified and very experienced resource professionals. The key staff that would provide oversight for project planning and implementation would include fishery biologists, hydrologists and engineers with support from archaeologists, wildlife biologists, botanists, foresters, and fiscal administrators. Members of the group have extensive experience in watershed restoration and knowledge of the subject watersheds.

In addition to the existing staff, support by other qualified resource professionals will be needed from other Forests (or through contract) to assist in project planning and implementation.

The Lassen National Forest has maintained an active role in the coordination of watershed management planning efforts with the Battle and Butte Creek Watershed Conservancies, and Sierra Pacific Industries. We view the collaborators as ongoing participants in the areas of general project planning and implementation, especially where there are mutual interests and needs (e.g. cost-share roads). The extent of the collaborators' involvement is growing at this time and is expected to become significantly greater as the Conservancies efforts continue and the results of these initial proposals prove to be valuable to all of the landowners and managers who are committed to restoring ecological function and improving land management practices within these watersheds.

Lassen National Forest Project Staff (position and qualifications):

Almanor Ranger District Staff

- Ken Roby District Fisheries Officer. B.S. Conservation of Natural Resources, M.S. Aquatic Ecology. Two years as Fisheries Biologist, East Bay Regional Parks. Nineteen years with Forest Service including Fisheries, Hydrology and Resource Officer positions (Plumas and/or Lassen). Experience in program planning, watershed restoration and implementation.
- Susan Chappell District Fisheries Biologist
B.S. Natural Resources Management. Two years as Wildlife Biologist, California Department of Fish and Game. Two years as Wildlife Biologist, Forest Service (Plumas). Seven years as Fisheries Biologist, Forest Service (Lassen). Experience in recommending stream crossing designs; road and landing decommissioning to benefit aquatic resources; program planning and implementation.
- Diane Watts District Archaeologist.
B.A. Anthropology, M.A. Anthropology. Twenty one years as an Archeologist.
- Scott Armentrout District Wildlife Biologist.
B.S. Wildlife Science. Five years as wildlife biologist and four years as Fish/Wildlife/Range Staff (Rogue River N.F.); one year as district wildlife biologist on Lassen N.F.
- Greg Napper Transportation Planner/Forest CALFED Engineer.
B.S. Civil Engineering. 20 years with the Forest Service with experience in all aspects of Road Engineering including, reconnaissance, design, operations and maintenance. Road Manager for 15 years (Stanislaus), with experience in planning and implementation of a variety of road projects.
- Russ Volke District Silviculturist/CALFED District Project Coordinator
B.S. Forest Watershed Management. Ten years in Forest Management on the Gila National Forest and tens years in Timber Management on the Lassen National Forest Service Certified Silviculturist since 1985.
- Mignon Everett-Brown, Soil Scientist, Almanor Ranger District
B.S. Natural Resources Planning and Implementation, Minor in Soil Science
Two years experience as a Soil Scientist on the Almanor R. D., and two years experience as a GIS technician working for Redwood National Park. Experience in planning and implementing watershed restoration projects, as well as soil and water resource projects with the aid of GIS.

Supervisor's Office Staff

- Steve Young Forest Hydrologist.
B.S. Forest Management, M.S. Watershed Management. Two years as sale preparation forester and two years as Zone Hydrologist (Plumas). Four years as District Resource Officer and thirteen years as Forest Hydrologist (Lassen). Experience in watershed restoration, planning and implementation.
- Melanie McFarland Forest Fisheries Biologist.
B.S. Fisheries. Five years of seasonal fisheries experience working for private organizations, consultants and the California Department of Fish and Game. Three years as Fisheries Biologist with the U.S. Fish and Wildlife Service. Eight years as Forest Fisheries Biologist (Lassen). Experience in program planning and implementation.
- Rick Kennedy Assistant Forest Engineer
B.S. Civil Engineering. Registered Civil Engineer in the State of California. Thirty four years with the Forest Service working in all engineering disciplines including roads, bridges, dams, buildings, water systems, sewer systems, etc. Karyl Georgio Forest Chief Financial Officer.
B.S. Outdoor Recreation Planning. Two years manpower development specialist and ten years business administrator. One year in present position.
- Beth Corbin Forest Botanist
B.S. Botany, M.S. Botany/Plant Ecology. Forest Service experience as fuels and forestry technician. Eight years as Forest Botanist (Lassen). Experience in recommending and collecting native plant species for revegetation projects.
- Lois Charlton Forest Lands Officer.
Four years college coursework. Seven years as realty specialist and three years as Forest Lands Officer (Lassen).

VII. COMPLIANCE WITH STANDARD TERMS AND CONDITIONS

Per Table D-1 (Attachment D) in the CALFED RFP, considering the inclusion of a services contract task in this Phase I proposal, endorsed forms for item 8 (Non-Discrimination compliance) and item 11 (Noncollusion) are enclosed after Attachment B.

Item 1 (Public entities), Item 4 (Public works), Item 5 (Insurance requirements), Item 6 (Nondiscrimination), Item 9 (Cert of Insurance), and Item 10 (Payment bond) will be submitted after award of any CALFED contract for this PHASE I proposal, no later than at the time of signing.

Table 1 - Phase I budget costs for Lassen N.F. project in Butte and Battle Creek Watersheds

Project phase and task	Direct labor hours	Direct salary and benefits	Overhead labor (gen'l admin & fee) @ 20%	Service Contracts	Material and acquisition contracts	Misc. and other direct costs	Requested CALFED funding	Forest Service Contribution	Total task cost
PHASE I (CY 1999-2001)									
Task 1: Complete Road Surveys and Inventory Database Update									
1.a. Road Survey	80	\$2,200	\$500	\$30,500			\$33,200	\$2,000	\$35,200
1. b. Complete analysis of road surveys	40	\$1,100	\$250	\$14,200			\$15,550	\$3,000	\$18,550
1.c. Update NFS road system database for project area and build GIS and Oracle files	180	\$5,500	\$1,100			\$500	\$7,100	\$1,500	\$8,600
Task 1 Total							\$55,850	\$6,500	\$62,350

I-010789

I-010789

Table 1 - Phase I budget costs for Lassen N.F. project in Butte and Battle Creek Watersheds

Project phase and task	Direct labor hours	Direct salary and benefits	Overhead labor (gen'l admin & fee) @ 20%	Service Contracts	Material and acquisition contracts	Misc. and other direct costs	Requested CALFED funding	Forest Service Contribution	Total task cost
PHASE I (CY 1999-2001)									
Task 1: Complete Road Surveys and Inventory Database Update									
1.a. Road Survey	80	\$2,200	\$500	\$30,500			\$33,200	\$2,000	\$35,200
1. b. Complete analysis of road surveys	40	\$1,100	\$250	\$14,200			\$15,550	\$3,000	\$18,550
1.c. Update NFS road system database for project area and build GIS and Oracle files	180	\$5,500	\$1,100			\$500	\$7,100	\$1,500	\$8,600
Task 1 Total							\$55,850	\$6,500	\$62,350

I-010790

I-010790

Table 1 - Phase I budget costs for Lassen N.F. project in Butte and Battle Creek Watersheds

Project phase and task	Direct labor hours	Direct salary and benefits	Overhead labor (gen'l admin & fee) @ 20%	Service Contracts	Material and acquisition contracts	Misc. and other direct costs	Requested CALFED funding	Forest Service Contribution	Total task cost
Task 2: Prepare Road Management Plan									
2.a. Initiate Road Management Planning with public involvement	1,000	\$32,000	\$5,800			\$1,000	\$39,800	\$3,500	\$43,300
2..b. Coordinate with cost share cooperators, conservancies, county, and private landowners	240	\$7,500	\$1,500				\$9,000	\$2,500	\$11,500
2.c. Prepare Road Management Plan for Butte and Battle Watersheds	740	\$23,500	\$4,500			\$1,500	\$29,500	\$3,000	\$32,500
2.d. Resource evaluations, site surveys and design, NEPA	1,800	\$60,000	\$15,000			\$2,000	\$77,000	\$5,000	\$82,000
2.e. Preparation of a Monitoring Plan	80	\$2,500	\$500			\$200	\$3,200	\$1,000	\$4,200
Task 2 Total							\$158,500	\$15,000	\$173,500

I-010791

I-010791

Table 1 - Phase I budget costs for Lassen N.F. project in Butte and Battle Creek Watersheds

Project phase and task	Direct labor hours	Direct salary and benefits	Overhead labor (gen'l admin & fee) @ 20%	Service Contracts	Material and acquisition contracts	Misc. and other direct costs	Requested CALFED funding	Forest Service Contribution	Total task cost
Task 3: Complete watershed assessments									
3.a. Determine data needs and collection protocol with partners	200	\$5,500	\$1,000				\$6,500	\$2,000	\$8,500
3.b. Gather key watershed information	240	\$8,000	\$1,500			\$1,000	\$10,500	\$5,000	\$15,500
3.c. Complete Watershed Assessment Reports	1,500	\$45,000	\$9,000			\$2,000	\$56,000	\$20,000	\$76,000
Task 3 Total							\$73,000	\$27,000	\$100,000

I-010792

I-010792

Table 1 - Phase I budget costs for Lassen N.F. project in Butte and Battle Creek Watersheds

Project phase and task	Direct labor hours	Direct salary and benefits	Overhead labor (gen'l admin & fee) @ 20%	Service Contracts	Material and acquisition contracts	Misc. and other direct costs	Requested CALFED funding	Forest Service Contribution	Total task cost
Task 4:									
Evaluate Land exchange opportunities									
4.a. Contact private landowners to determine interest in selling/ exchange		\$3,000	\$1,000				\$4,000	\$1,000	\$5,000
4.b. Prioritize potential land acquisitions based on ecological restoration and protection objectives		\$2,500	\$1,000			\$1,000	4,500	\$1,500	\$6,000
Task 4 Total							\$8,500	\$2,500	\$11,000
PHASE I TOTAL							\$295,850	\$51,000	\$346,850

I-010793

I-010793

Table 2 - Schedule milestones for Lassen N.F. project in Butte and Battle Creek watersheds

Project phase and task	Starting date	Completion date	Expected payment
PHASE I	1999	2002	Annually after submission of a progress report, deliverables, and a bill for payment (each November1)
Task 1: Road Survey and Inventory Update	1999	2000	
1.a. Survey Roads	1999	1999	
1.b. Coordinate with Co-op Road Managers, private landowners, counties, Cal Trans	1999	1999	
1.c. Update NFS road system database for project area and build GIS and Oracle files	1999	2000	

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Table 2 - Schedule milestones for Lassen N.F. project in Butte and Battle Creek watersheds

Project phase and task	Starting date	Completion date	Expected payment
Task 2: Prepare Road Management Plan	2000	2002	
2.a. Initiate Road Management Plan with public involvement	2000	2000	
2.b. Coordinate with cost share cooperators, conservancies, county, and private	2000	2001	
2.c. Prepare Road Management Plan	1999	2001	
2.d. Resource evaluations, site surveys, and design, NEPA	2001	2002	
2.e. Prepare Monitoring Plan	2000	2000	

I-010795

I-010795

Table 2 - Schedule milestones for Lassen N.F. project in Butte and Battle Creek watersheds

Project phase and task	Starting date	Completion date	Expected payment
Task 3: Complete Watershed Assessments	1999	2000	
3.a. Determine data needs and collection protocol with partners	1999	1999	
3.b. Gather key watershed information	1999	2000	
3.c. Complete Watershed Assessment Reports	2000	2002	
Task 4: Identify Land exchange opportunities	2000	2002	
4.a. Identify landowners in the watershed	2000	2000	
4.b. Determine criteria and opportunities for acquisition	2000	2002	

Notes: Site survey and design includes archaeological inventory and evaluation of proposed sites

Endangered Species Act consultation would be primarily with National Marine Fisheries Service

Site survey and design includes archaeological inventory and evaluation of identified road sites or other disturbed areas

Table 2 - Schedule milestones for Lassen N.F. projects in Butte and Battle Creek Watersheds

Project phase and task	Starting date	Completion date	Expected payment
PHASE II (Contingent on completion and funding of Phase I)	2002	2004	Annually after submission of a progress report, deliverables, and a bill for payment (each November1)
Task 1: Prepare construction contracts	2002	2002	
Task 2: Accomplish construction/ ecosystem restoration projects; administer contracts	2002	2004	
Task 3: Acquire lands or easements	2002	2003	
Task 4: Monitoring, evaluation and reporting	2003	2004	

NONDISCRIMINATION COMPLIANCE STATEMENT

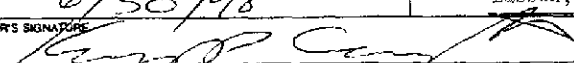
ITEM 7

COMPANY NAME
Lassen National Forest, Forest Service, USDA

The company named above (hereinafter referred to as "prospective contractor") hereby certifies, unless specifically exempted, compliance with Government Code Section 12990 (a-f) and California Code of Regulations, Title 2, Division 4, Chapter 5 in matters relating to reporting requirements and the development, implementation and maintenance of a Nondiscrimination Program. Prospective contractor agrees not to unlawfully discriminate, harass or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, disability (including HIV and AIDS), medical condition (cancer), age, marital status, denial of family and medical care leave and denial of pregnancy disability leave.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized to legally bind the prospective contractor to the above described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.

OFFICIAL'S NAME Kent P. Connaughton	
DATE EXECUTED 6/30/98	EXECUTED IN THE COUNTY OF Lassen, State of California
PROSPECTIVE CONTRACTOR'S SIGNATURE 	
PROSPECTIVE CONTRACTOR'S TITLE Forest Supervisor	
PROSPECTIVE CONTRACTOR'S LEGAL BUSINESS NAME KENT P. CONNAUGHTON	

Agreement No. _____

Exhibit _____

**NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY
 BIDDER AND SUBMITTED WITH BID FOR PUBLIC WORKS**

STATE OF CALIFORNIA)
)ss
 COUNTY OF Lassen)

KENT P. CONNAUGHTON

(name)

. being first duly sworn, deposes and

says that he or she is Forest Supervisor of
 (position title)

Lassen National Forest, Forest Service, USDA

(the bidder)

the party making the foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

DATED: 6/30/98

By Kent P. Connaughton
 (person signing for bidder)

Subscribed and sworn to before me on

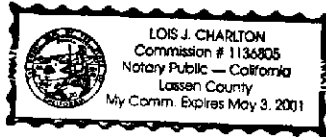
 (Notary Public)

(Notarial Seal)

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California
County of Lassen
On June 30, 1998 before me, Lois J. Charlton
Date Name and Title of Officer (e.g., "Jane Doe, Notary Public")
personally appeared Kent P. Connaughton
Name(s) of Signer(s)

☒ personally known to me - OR - ☐ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



WITNESS my hand and official seal.

Lois J. Charlton
Signature of Notary Public

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

Description of Attached Document

Title or Type of Document: Non collusion Affidavit
Document Date: 6/30/98 Number of Pages: 1
Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer(s)

Signer's Name: _____

- ☒ Individual
☐ Corporate Officer
Title(s): _____
☐ Partner ☐ Limited ☐ General
☐ Attorney-in-Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____

RIGHT THUMBPRINT
OF SIGNER
Top of thumb here

Signer Is Representing: _____

Signer's Name: _____

- ☐ Individual
☐ Corporate Officer
Title(s): _____
☐ Partner ☐ Limited ☐ General
☐ Attorney-in-Fact
☐ Trustee
☐ Guardian or Conservator
☐ Other: _____

RIGHT THUMBPRINT
OF SIGNER
Top of thumb here

Signer Is Representing: _____